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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,997	10/31/2005	Fuquan Liang	99999.IEM030012P	6314
21967 75 HUNTON & WI	590 02/26/2007 LLIAMS LLP	EXAMINER		
INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109			VENNE, DANIEL V	
			ART UNIT	PAPER NUMBER
			3617	
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SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/527,997	LIANG FUQUAN				
Office Action Summary	Examiner	Art Unit				
	Daniel V. Venne	3617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION B6(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
 1) ☐ Responsive to communication(s) filed on 21 Ma 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
 4) Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-8 is/are rejected. 7) Claim(s) 1-8 is/are objected to. 8) Claim(s) are subject to restriction and/or 						
Application Papers						
9) ☐ The specification is objected to by the Examiner 10) ☐ The drawing(s) filed on 31 October 2005 is/are: Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examiner	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
		•				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/17/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

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DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- 2. The abstract and specification sections of the disclosure are objected to because of numerous incomplete sentences and numerous grammatical errors. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. In addition, inconsistent terminology is used in the disclosure to describe the same part or component of the invention. The abstract is also greater than 150 words. Correction is required.
- 3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

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(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

4. Claims 1-8 are objected to because of numerous informalities, including missing words and grammatical errors. In addition, inconsistent terminology is used in the claims to describe the same part or component. Claim 8 also implies dependency to any one of more than one claim but only indicates dependency on claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

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- 8. Regarding claims 1 and 4, the phrase "etc." renders the claims indefinite because the claim includes elements not actually disclosed (those encompassed by "etc."), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).
- 9. Claim 1 recites the limitations "the vessel", "the wing power electrical generator", "the high energy storage battery system", "the submerging control valve", "the outer water bags", "the draining volume of the submarine", "the specific gravity of the vessel body", "the connection valve", "the operating rod of elevator", "the angle of elevator and the multifunction sail wing", "the tank", "the one way draining valve", "the water tank", "the one way valve", "the water bags", "the angle of elevator", "operating rod", "certain angle", "certain height", "previous submerging process", and "such draining". There is insufficient antecedent basis for these limitations in the claim.
- 10. Claim 2 recites the limitations "the vessel", "the elevating control wheel", "the wing angle control wheel", "the said wing control rope", "the windward angle, "the aid of wind power", and "the same time". There is insufficient antecedent basis for these limitations in the claim.
- 11. Claim 3 recites the limitations "the wind power electrical generator", "fan blade", and electrical motor". There is insufficient antecedent basis for these limitations in the claim.

- 12. Claim 4 recites the limitations "the flying wheel", "the rotating propeller", "the thrust", "the vessel body" and "the thrust bearing". There is insufficient antecedent basis for these limitations in the claim.
- 13. Claim 5 recites the limitations "the aid of sail" and "the electrical motor". There is insufficient antecedent basis for these limitations in the claim.
- 14. Claim 6 recites the limitations "the wind power generating electricity system", "the fuel battery system", "the internal combustion engine power system", "passed air tube traveling condition", and "advancing and charging". There is insufficient antecedent basis for these limitations in the claim.
- 15. Claim 7 recites the limitations "the vessel", "corresponding mechanical or electrical testing and protective devices", "the function", "submerging safe boundary", "the operator", "corresponding provision", "said protective device", "partial water", "the high pressure resistant water tank", "vessel", "buoy up", "this operation step", "inefficiency", "elevating water bag", "air filled valve", "crew" and "safe". There is insufficient antecedent basis for these limitations in the claim.
- 16. Claim 8 recites the limitations "the wind power generating electricity system", "the fuel battery system", "the internal combustion engine power system", traveling condition", "passed air tube traveling condition" and "advancing and charging". There is insufficient antecedent basis for these limitations in the claim.
- 17. Regarding claim 1, the phrase "like a" in the last line of the claim renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

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Conclusion

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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel V. Venne whose telephone number is (571) 272-7947. The examiner can normally be reached between 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or CANADA) or 571-272-1000.

DVV 20 February 2007

/JESUS D. SOTELO
PRIMARY EXAMINER
A. / 36/7